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10/583,766	06/21/2006	Thomas Jaetsch	CH-8458/CHS03 1011	8750
34947 7590 04/29/2010 LANXESS CORPORATION 111 RIDC PARK WEST DRIVE PITTSBURGH, PA 15275-1112				
EXAMINER				
BECKHARDT, LYNDSEY MARIE				
ART UNIT		PAPER NUMBER		
1615				
MAIL DATE		DELIVERY MODE		
04/20/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/583,766

**Applicant(s)**

JAETSCH ET AL.

**Examiner**

LYNDSEY BECKHARDT

**Art Unit**

1615

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6, 10-19, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2 and 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3, 5, 6, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date \_\_\_\_\_
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-3, 5-6, 10-19 and 21-22 are currently pending. Claims 3, 5-6 and 21-22 are currently under examination.

### ***Election/Restrictions***

Applicant's election of Group II in the reply filed on 01/12/2010 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-2 and 10-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 01/12/2010.

### ***Priority***

The instant application claims priority to International Application PCT/EP04/14287, filed 12/15/2004 and German application 103 60 836.2, filed 12/23/2003.

### ***Information Disclosure Statement***

Applicant's Informational Disclosure Statement, filed on 06/21/2006 has been considered. Please refer to Applicant's copy of the 1449 submitted herein.

### ***Claim Rejections - 35 USC § 112 - New Matter***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 21 and 22** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 21 and 22 recite 'combinations thereof' in the last line of each claim. The instant specification provides no support for combinations of boron compounds, see instant specification, page 9, lines 4. The instant specification provides no support for combinations of quaternary ammonium compounds, see instant specification, page 7, line 26 to page 8, line 1.

***Claim Rejections - 35 USC § 112- Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 6** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the insecticidally active compound of Formula I can be present at 100% weight of the composition when claim 3, from which claim 6 depends, requires components other than the active compound of Formula I, such as boron compound, quaternary ammonium compound and at least one

solvent/diluents. When additional compounds, other than the active compound of Formula I, are present, as is required, Formula I could not be present at 100% weight of the composition. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

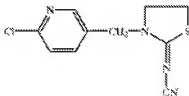
A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 3 and 5-6 are rejected under 35 U.S.C. 102(a/e) as being anticipated by US 2003/0149080 (publication date: 08/07/2003).**

The '080 publication teaches a composition for controlling plant pests, which contain the compound of formula (I):



(abstract)

in mixture with fungicidally active compounds (abstract). The additional fungicidally active compound can be chosen from a list which includes cyproconazole,

propiconazole and tebuconazole (page 8-9, paragraph [0071]). The mixtures show synergistic effect (page 9, paragraph [0072]). In generation 0.1 to 10 parts by weight, preferably 0.3 to 3 parts by weight of at least one fungicidal active compound are present per part by weight of the active compounds of the formula (I) (page 9, paragraphs [0074] to [0075]). The active compound combinations according to the invention are particularly suitable for controlling fungal attack (page 9, paragraph [0077]). The active compound combination according to the invention can be converted into customary formulations, such as solutions, emulsions and suspensions (page 10, paragraph [0098]). The active components can be mixed with extenders, that is liquid solvents, liquified gases under pressure and/or solid carriers. If the extender used is water, it is also possible to use, for example, organic solvents as auxiliary solvents (page 10, paragraph [0099]). It is also possible to add trace nutrients, such as salts of iron, manganese, boron, copper, cobalt, molybdenum and zinc (page 10, paragraph [0101]). The formulation generally comprises between 0.1 and 95 percent by weight of active compound (page 10, paragraph [0102]). In the formulation the active compound combinations according to the invention can be present as a mixture with other known active compounds, such as fungicides and insecticides (page 10, paragraph [0103]). The formulation can be prepared as ready-to-use solutions or concentrates (page 10, paragraph [0104]). It has been found that the active compound combination according to the invention has a potent insecticidal action against insects which destroy industrial materials, such as beetles and termites (page 10, paragraphs [0109], [0111], [0115]). Industrial materials are understood to be e.g. timber products. The materials to be

protected against attack by insects are very particularly wood and timber products (page 11, paragraphs [0118] and [0119]). The insecticidal compositions or concentrates used for the protection of wood and wooden materials comprise the active compound according to the invention at a concentration of 0.0001 to 85% by weight, in particular 0.01 to 60% by weight (page 11, paragraph [0123]).

Regarding claim 3, the '080 publication teaches a formulation comprising the active compound in of Formula (I), boron and a solvent/diluent.

Regarding claim 5, the '080 publication teaches the formulation additionally containing fungicidally active compounds.

Regarding claim 6, the '080 publication teaches the active component being present from 0.0001% to 85%.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

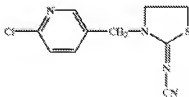
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 3, 5-6, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0149080 (publication date: 08/07/2003) in view of EP 1025967 (publication date: 08/09/2000).**

The '080 publication teaches a composition for controlling plant pests, which contain the compound of formula (I):



(abstract)

in mixture with fungicidally active compounds (abstract). The additional fungicidally active compound can be chosen from a list which includes cyproconazole,



propiconazole and tebuconazole (page 8-9, paragraph [0071]). The mixtures show synergistic effect (page 9, paragraph [0072]). In generation 0.1 to 10 parts by weight, preferably 0.3 to 3 parts by weight of at least one fungicidal active compound are present per part by weight of the active compounds of the formula (I) (page 9, paragraphs [0074] to [0075]). The active compound combinations according to the invention are particularly suitable for controlling fungal attack (page 9, paragraph [0077]). The active compound combination according to the invention can be converted into customary formulations, such as solutions, emulsions and suspensions (page 10, paragraph [0098]). The active components can be mixed with extenders, which are liquid solvents, liquified gases under pressure and/or solid carriers. If the extender used is water, it is also possible to use, for example, and organic solvents as auxiliary solvents (page 10, paragraph [0099]). It is also possible to add trace nutrients, such as salts of iron, manganese, boron, copper, cobalt, molybdenum and zinc (page 10, paragraph [0101]). The formulation generally comprises between 0.1 and 95 percent by weight of active compound (page 10, paragraph [0102]). In the formulation the active compound combinations according to the invention can be present as a mixture with other known active compounds, such as fungicides and insecticides (page 10, paragraph [0103]). The formulation can be prepared as ready-to-use solutions or concentrates (page 10, paragraph [0104]). It has been found that the active compound combination according to the invention have a potent insecticidal action against insects which destroy industrial materials, such as beetles and termites (page 10, paragraphs [0109], [0111], [0115]). Industrial materials are understood to be e.g. timber products.

The materials to be protected against attack by insects are very particularly wood and timber products (page 11, paragraphs [0118] and [0119]). The insecticidal compositions or concentrates used for the protection of wood and wooden materials comprise the active compound according to the invention at a concentration of 0.0001 to 85% by weight, in particular 0.01 to 60% by weight (page 11, paragraph [0123]).

The '080 publication does not teach the boron compounds found in instant claim 21 or the formulation comprising a quaternary ammonium compound.

The '967 publication teaches wood preservatives on the basis of boric acid and quaternary ammonium compounds as well as method to protect wood using the agents of the invention (page 1, paragraph [0001]). It is known that boric acid, its salts and complex borates are used for the protection of wood and wood products against wood destructive fungi and insects (page 1, paragraph [0002]). Quaternary ammonium compounds are also known to protect wood and wood products against fungi and insects (page 1, paragraph [0003]). The object of the invention is to make a wood preservative which prevents fungi and wood-damaging insects, specifically beetles (page 1, paragraph [0005]). The formulation contains boric acid, a quaternary ammonium compounds, a wetting agent, water and at least one other fungicide (page 1, paragraph [0009]). Specific examples of fungicides include cyproconazole, propiconazole and tetraconazole (page 2, paragraph [0011]). Examples include boric acid and didecylmethyl polyoxyethyl ammonium propionate (page 2, paragraph [0013], [Example 1] and page 3, [Example 2]).

It would be prima facie obvious to one of ordinary skill in the art at the time the invention was made to use boric acid and didecylmethyl polyoxyethyl ammonium propionate in the pest controlling formulation taught by the '080 publication because the '080 publication teaches a formulation used to treat industrial material such as wood including the compound of Formula in combination with a fungicidally active compounds and additional fungicides and insecticides can be includes in the formulation and the '967 publication teaches a formulation used to prevent insect and fungus formation comprising boric acid, a quaternary ammonium compound and further includes at least one other fungicide. One of ordinary skill in the art at the time the invention was made would have a high expectation of success in using boric acid and didecylmethyl polyoxyethyl ammonium propionate taught by the '967 publication in the formulation taught by the '080 publication because the '967 publication and the '080 are both directed to wood treating compositions for the prevention of fungus growth and insects and have overlapping fungicidal ingredients, such as cyproconazol, propiconazol and tetraconazol.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). The active ingredients in the '080 publication and the '967 publication are taught to be used on wood to prevent fungus growth and insects. Both the '080 publication and the '967 publication allow for

additional fungicides/insecticides in their formulations. It would be obvious to one of ordinary skill in the art at the time the invention was made the active ingredients in the '080 publication and the '967 publication can be combined to form a wood protecting composition which prevents fungus formation and insects.

Regarding claim 3, the '080 publication teaches the compound of Formula I used in combination with a fungicidally active compound. The '967 publication teaches formulation containing boric acid and a quaternary ammonium compound.

Regarding claim 5, the '080 publication teaches the formulation additionally containing fungicidally active compounds.

Regarding claim 6, the '080 publication teaches the active component being present from 0.0001% to 85%. The '080 publication teaches the formula being provided as a concentrate.

Regarding claim 21, the '967 publication teaches boric acid.

Regarding claim 22, the '967 publication teaches didecylmethyl polyoxyethyl ammonium propionate.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LYNDESEY BECKHARDT whose telephone number is (571)270-7676. The examiner can normally be reached on Monday thru Thursday 7:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571) 272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LYNDSEY BECKHARDT/  
Examiner, Art Unit 1615

/S. TRAN/  
Primary Examiner, Art Unit 1615